

OKADA, et al., 10/670,355
27 November 2006 Amendment
Responsive to 25 August 2006 Office Action

500.43169X00 / W1233-01EF
Page 10

REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

PENDING CLAIMS

Claims 1-9 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is presently interested. At entry of this paper, Claims 10-12 will be pending for further consideration and examination in the application.

REJECTION UNDER '112, 2ND PAR. OBSOLETE VIA CLAIM CANCELLATION

Claims 4-7 have been rejected under 35 USC '112, second paragraph, as being indefinite for the concerns listed within the section numbered "3" beginning on page 2 of the Office Action. Unrelated to any prior art rejection, ALL such claims have now been canceled without prejudice or disclaimer, thus rendering the rejection thereof obsolete at this time. Based upon the foregoing, reconsideration and withdrawal of the '112 second paragraph rejection are respectfully requested.

ALL REJECTIONS UNDER 35 USC '102 AND '103 - TRAVERSED

All 35 USC rejections (i.e., the 35 USC '102 rejection of claims 5-7 as being anticipated by Hunts et al. (U.S. Patent 6,610,974); and, the 35 USC '103 rejection of

OKADA, et al., 10/670,355
27 November 2006 Amendment
Responsive to 25 August 2006 Office Action

500.43169X00 / W1233-01EF
Page 11

claims 1-4, 8 and 9 as being unpatentable over Hunt et al. (U.S. Patent 6,610,974) in view of Cannell (U.S. Patent 6,519,383)) are respectfully traversed.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

In order to properly support a '102 anticipatory-type rejection, any applied art reference must disclose each and every limitation of any rejected claim. The applied art does not adequately support a '102 anticipatory-type rejection because, at minimum, such applied art does not disclose (or suggest) the following discussed limitations of Applicant's claims.

The following remarks are presented by Applicant's foreign patent representative. More particularly, Applicant's invention features an optical switch which comprises "light emitting elements", "a second plurality of input-side lenses" in an input-side lens array, "primary measuring mirrors" in a primary mirror array, "secondary measuring mirrors" in a secondary mirror array, "a second plurality of output-side lenses" in an output-side lens array, and "light receiving elements". With the above structure, control values for controlling angles at which the moving mirrors are moved are corrected. In other words, separately from moving mirrors performing normal optical communications, Applicant's light emitting elements, light receiving elements and the measuring mirrors are provided to perform correction of the control values. Thereby, a difference in the relative position between the lens array and the mirror array or between the mirror arrays is measured based on signals from the

OKADA, et al., 10/670,355
27 November 2006 Amendment
Responsive to 25 August 2006 Office Action

500.43169X00 / W1233-01EF
Page 12

correcting light receiving elements, and the control values of moving mirrors are corrected in accordance with the measured difference (error) in the relative position. As a result, the numbers of the correcting light receiving elements and use parameters can be made smaller and the processor used may be of a reduced processing capability.

On the other hand, in the applied prior art, a light beam to each mirror is separately branched and measured to feed back the measured value to correct the mirror's attitudes. For each mirror, the light receiving element measures a light intensity of communication light, and a control value for the mirror is controlled in accordance with the intensity of light received by the receiving element. Accordingly, the light receiving elements are required which are equal in number to the number of optical fibers. Thus, the required number of the receiving elements in the cited prior art is rather larger compared with that of Applicants' receiving elements.

Also, branching elements are required which are equal in number to the number of the optical fibers used. A processor which calculates correction values for the mirrors must perform the calculations for mirror correction for as many as the number of the optical fibers separately, so such processor must have a high capability. Therefore, the means or mechanism for correcting the mirror control value in the cited prior art is much more expensive when compared with that in Applicant's invention.

In addition to the above comments provided by Applicant's foreign patent representative, the following additional remarks are also respectfully submitted. More particularly, added claims 13-18 represent additional alternatively-worded claims. Such claims recite that each of the respective lens arrays have a same type of lenses, and each of the respective mirror arrays have a same type of mirrors.

OKADA, et al., 10/670,355
27 November 2006 Amendment
Responsive to 25 August 2006 Office Action

500.43169X00 / W1233-01EF
Page 13

Further, such claims recite that a major sub-plurality portion of the arrays is used for communicating the communication light beams, and that a minor sub-plurality portion of the arrays is used for communicating the measuring light beams. Further, such claims recited that the measuring light beams is passed between the minor sub-plurality items of the arrays. None of the applied art (taken alone, or in any combination) discloses or suggests such features/limitations.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a '102 anticipatory-type rejection or '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '102 and '103 rejections, and express written allowance of all of the rejected claims, are respectfully requested. Further, at this point, it is respectfully submitted as a reminder that, if new art is now cited against any of Applicant's unamended claims, then it would not be proper to make a next action final.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or

OKADA, et al., 10/670,355
27 November 2006 Amendment
Responsive to 25 August 2006 Office Action

500.43169X00 / W1233-01EF
Page 14

disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.43169X00) and please credit any excess fees to such deposit account.

OKADA, et al., 10/670,355
27 November 2006 Amendment
Responsive to 25 August 2006 Office Action

500.43169X00 / W1233-01EF
Page 15

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Paul J. Skwierawski
Registration No. 32,173

PJS/slk
(703) 312-6600